

Claims

1. A piezoelectric actuator, with

- a multilayered structure of piezoelectric layers (2) with inner electrodes (3, 4) disposed between them, with
- a contacting of the inner electrodes (3, 4) on alternating sides with outer electrodes (5, 6), and with chamfered corners or edges (10) on the piezoelectric actuator (1), characterized in that
- in the region of the corners or edges (10), on the sides of the piezoelectric actuator (1) on which the inner electrodes (3, 4) with alternating polarities are routed to the respective outer electrodes (5, 6), the inner electrodes (3) have a contour that makes it possible to achieve a lower field intensity between the inner electrodes (3, 4) of alternating polarities in the structure of piezoelectric layers (2).

2. The piezoelectric actuator according to claim 1, characterized in that

- the chamfers at the corners of the piezoelectric actuator (1) are embodied so that the edge (10) on the side that is not contacted by the outer electrodes (5, 6) has an obtuse angle (a).

3. The piezoelectric actuator according to claim 1, characterized in that

- the chamfers at the corners of the piezoelectric actuator (1) are embodied so that at least the edge (10) on the side that is not contacted by the outer electrodes (5, 6) is rounded.

4. The piezoelectric actuator according to claim 3, characterized in that
 - the chamfers at the corners of the piezoelectric actuator (1) are embodied so that the entire corner of the piezoelectric actuator (1) and correspondingly, the contour of the respectively non-contacted inner electrode (3), is rounded.
5. The piezoelectric actuator according to claim 3, characterized in that
 - the chamfers at the corners of the piezoelectric actuator (1) are embodied so that the entire corner of the piezoelectric actuator (1) is beveled and the contour of the respectively non-contacted inner electrode (3), is rounded.
6. The piezoelectric actuator according to one of claims 2 to 5, characterized in that
 - on the side of that the inner electrode (4) of the respective opposite polarity is contacted, the contour of the respectively non-contacted inner electrode (3) is embodied so that it is recessed a preset amount from the outer contour of the piezoelectric actuator (1).
7. The piezoelectric actuator according to claim 6, characterized in that
 - the contour of the respectively non-contacted inner electrode is recessed in accordance with the outer contour of the piezoelectric actuator.